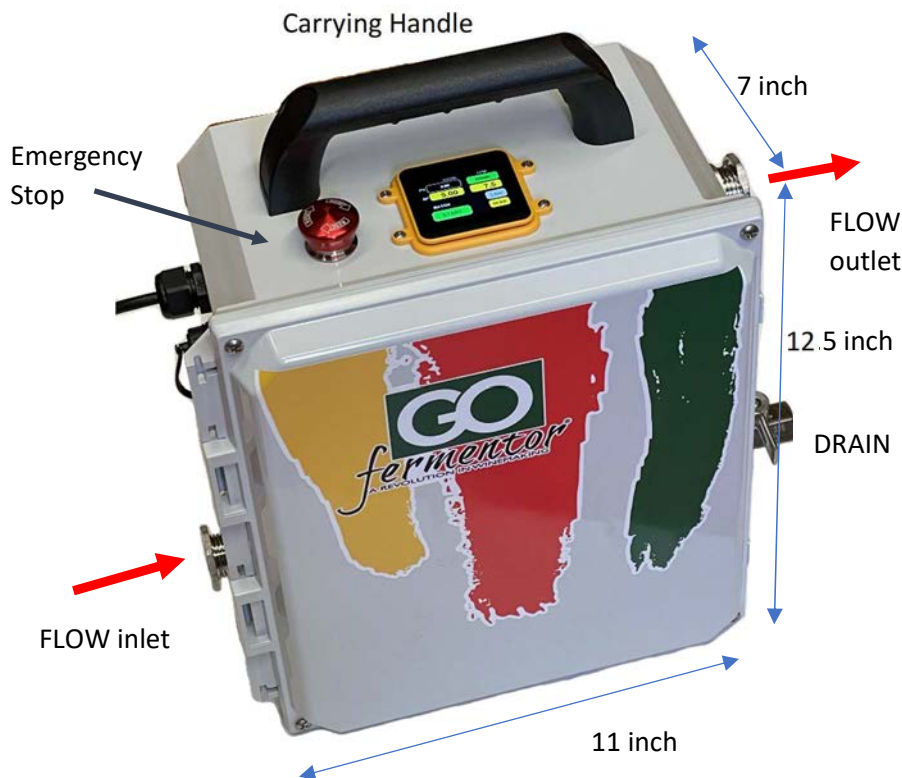# GOpump Operating Manual

## Ver 1.0  03/24/2023

GOpump is an intelligent pump for pumping wine or similar fluids. It can be used in 1) PUMP mode where the delivery rate is automatically controlled at the user set flowrate; 2) BATCH mode where a user preset volume is delivered at user set flowrate. And finally, 3) REMOTE mode where pump can be controlled by external device or app (Bluetooth).

**NOTE:**  Do not use with fluids containing particles larger than 1mm. Use the provided inlet strainer to protect the  pump mechanism. DO NOT pump grape *must*. Air or foam in the line will significantly reduce flow measurement accuracy. Use the PRIME function to ensure the pump is completely full of liquid before using the flow controlled functions.
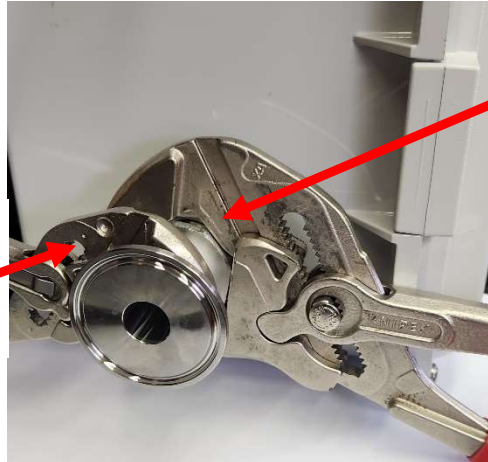


**USAGE:** general purpose winery pump for transferring or filling wine. Built-in accurate totalizer based on magnetic flux sensing (no moving parts) provides accurate estimate of total wine transferred. Controllable flow rate allows gentle or rapid transfer of wine. Automatic shutdown on empty detection or overpressure.

**EMERGENCY STOP:** pressing the EMERGENCY STOP will immediately shut off power to the pump. The current total is however retained and will be displayed on next power up.

**INSTALLATION:** Install the select inlet and outlet port fitting. The strainer filler is screwed into the 1/2FNPT inlet port. The fitting with the sightglass is screwed into the outlet port. Use a wrench to prevent the ports from turning when attaching the fittings as shown:



Hold hex nut on pump with a wrench to prevent it from turning when the fitting is screwed on or off

Use second wrench to install or remove fitting. Use pipe tape on the threads.

GOpump is portable and can be plugged into any suitable AC outlet. The unit is equipped with a GFI which will disconnect power in the event of a malfunction or ground fault.

Plug the GFI plug into AC to power the GOpump. Power LED should light up and touchscreen should activate. Press the **TEST** button to turn power off. Press **RESET** to turn back on if tripped.
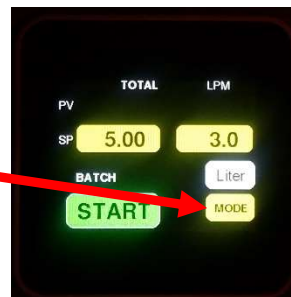


Power LED

RESET

TEST

**OPERATION:**

All operations are performed using the touchscreen.

Priming to remove all air from the pump and filling of the lines is necessary for accurate measurement of volume. Press the **PRIME** button on the display. This will run the pump as long as the button is depressed. Run **PRIME** until all air has been cleared at the outlet side.
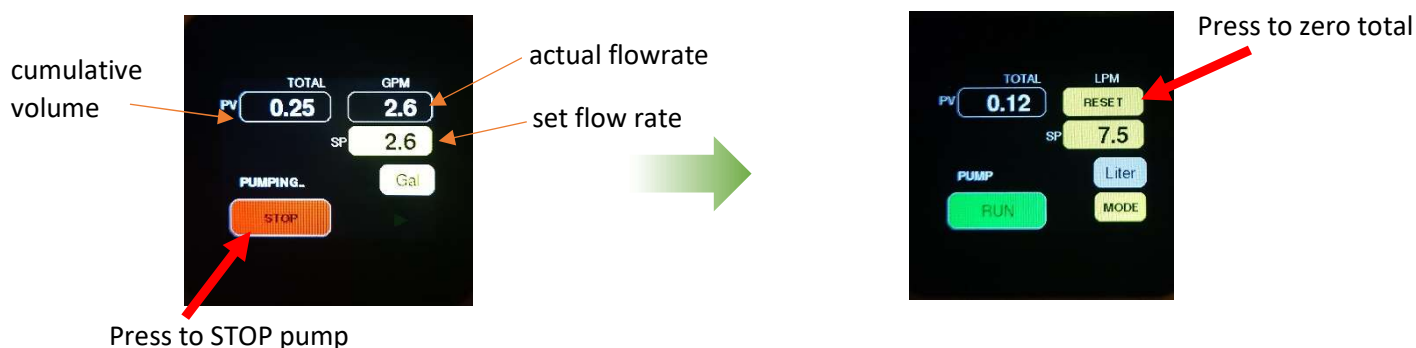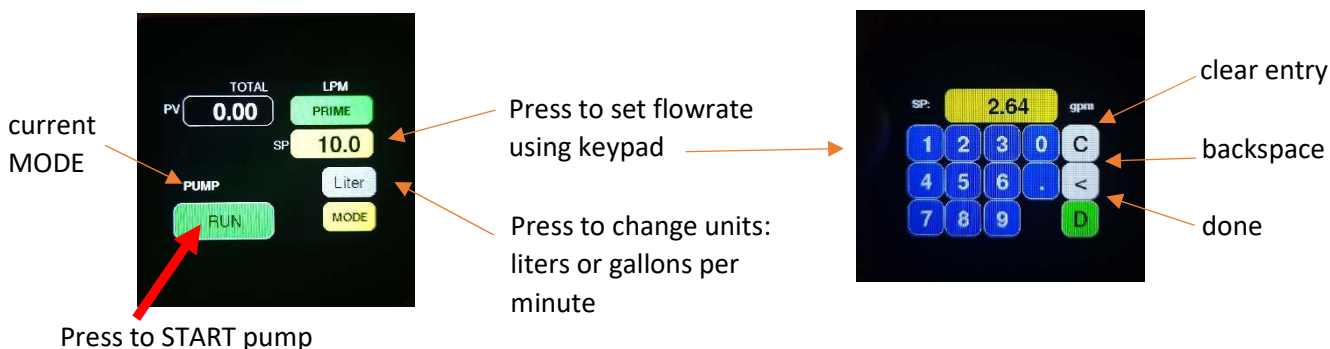
**OPERATING MODE (PUMP, BATCHER, or REMOTE):**

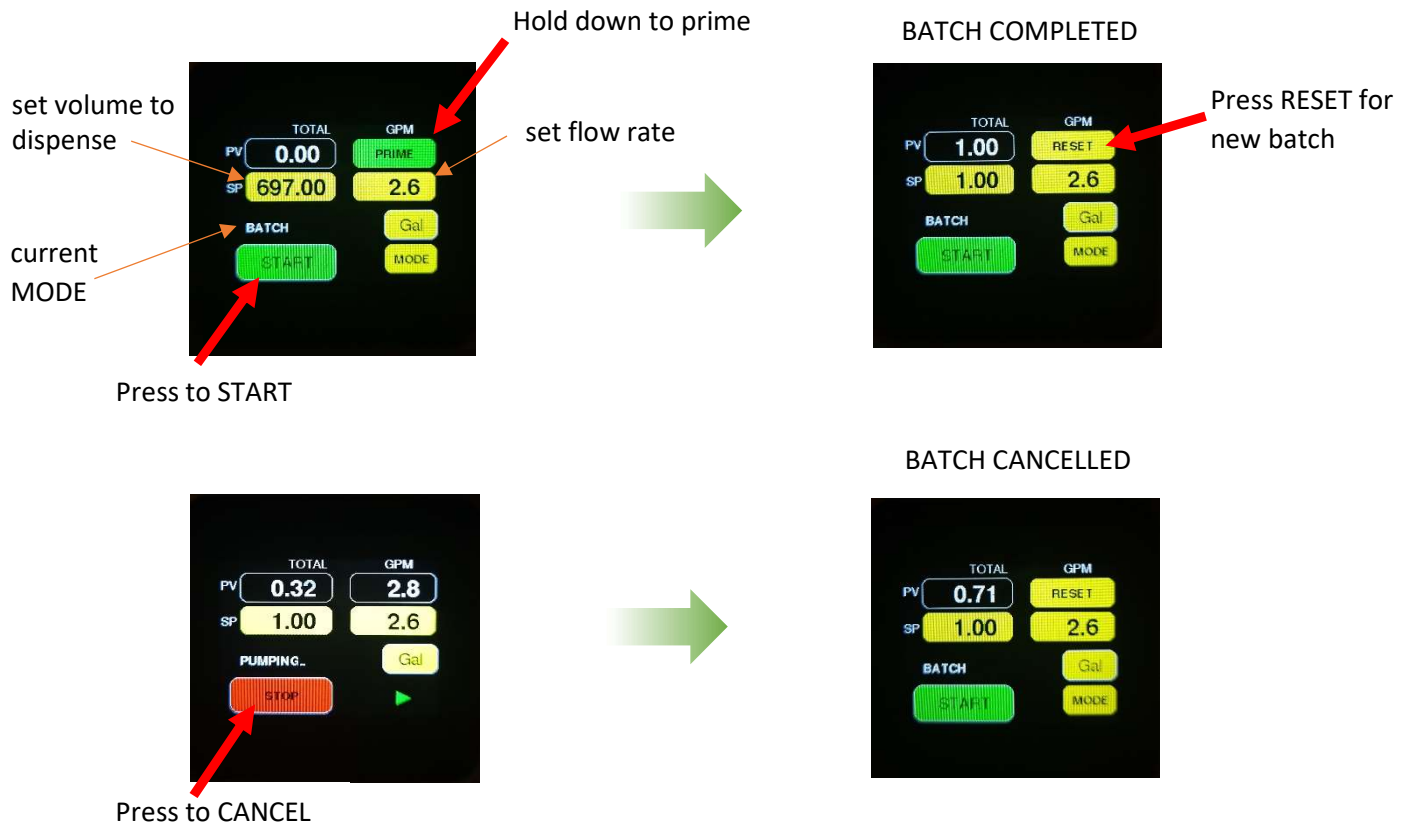Operating mode can be switched by pressing the **MODE** button:

- **PUMP MODE:**

Functions as a variable flow pump. Will control the flowrate at the set value. Cumulative volume is displayed and saved until **RESET** is pressed or mode is changed.

current MODE

Press to set flowrate using keypad

Press to change units: liters or gallons per minute

Press to START pump

clear entry

backspace

done

cumulative volume

actual flowrate

set flow rate

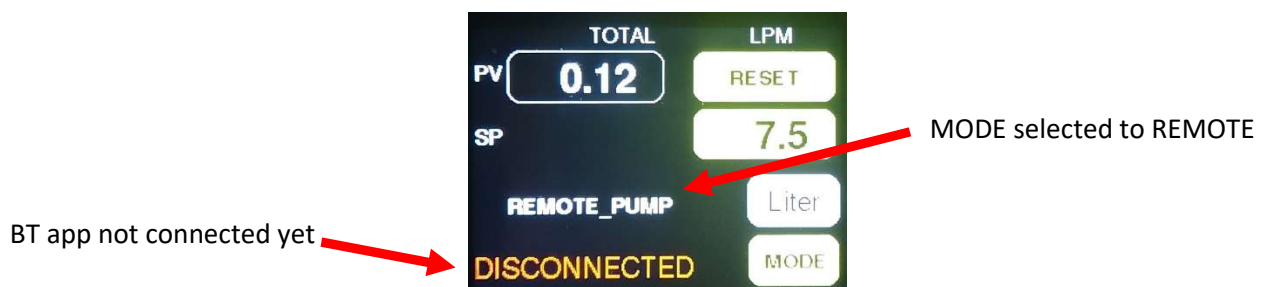Press to zero total

Press to STOP pump

- **BATCH MODE:**

Will dispense a preset volume. Flowrate can be set at any desired value for speed, and to control foaming. Enter desired flowrate and batch volume using the keypad display. Press **START** to begin batching. Upon completion or cancellation of a batch run, press **START** again to resume totalization, or press **RESET** to set the total back to zero.

3

Hold down to prime

BATCH COMPLETED

set volume to dispense

set flow rate

Press RESET for new batch

current MODE

Press to START

BATCH CANCELLED

Press to CANCEL

- **REMOTE MODE:**

The GOpump can be controlled wirelessly using a BlueTooth app. This app is currently only available for the Android system. To download the app – Visit www.gofermentor.com/support find the GOpumpX.zip in the DOWNLOADS section. This is easily done on the device you plan to use to remotely control the pump, ie phone or tablet. Unzip the file, install the APK (might give warning of unsafe because it is from an unknown source, please ignore).

On the GOpump touch press **MODE** a few times until either REMOTE PUMP or REMOTE BATCH is displayed. This remote mode is based on the last remote MODE used and can only be changed from the app.
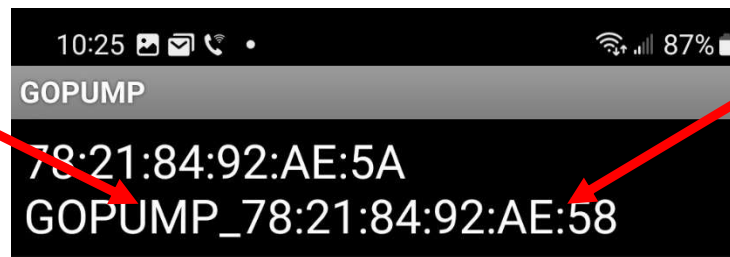
MODE selected to REMOTE

BT app not connected yet

**NOTE:** PRIME can only be done from the local TouchPanel. This is to prevent accidental operation.

CONNECTING:

1. Pair the pump via BLUETOOTH. On you phone/tablet pair the GOPUMP. Connections-> Bluetooth->scan. A GOPUMP device should appear. Select the one corresponding to the mac address to pair. Pairing only needs to be performed once when a new device is added.
2. Set the GOPUMP to remote using the **MODE** button on the touchpanel. Make sure GOPUMP app is installed. Click on [GO Pump]    When the app opens click on
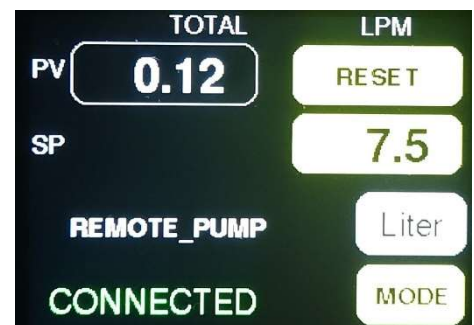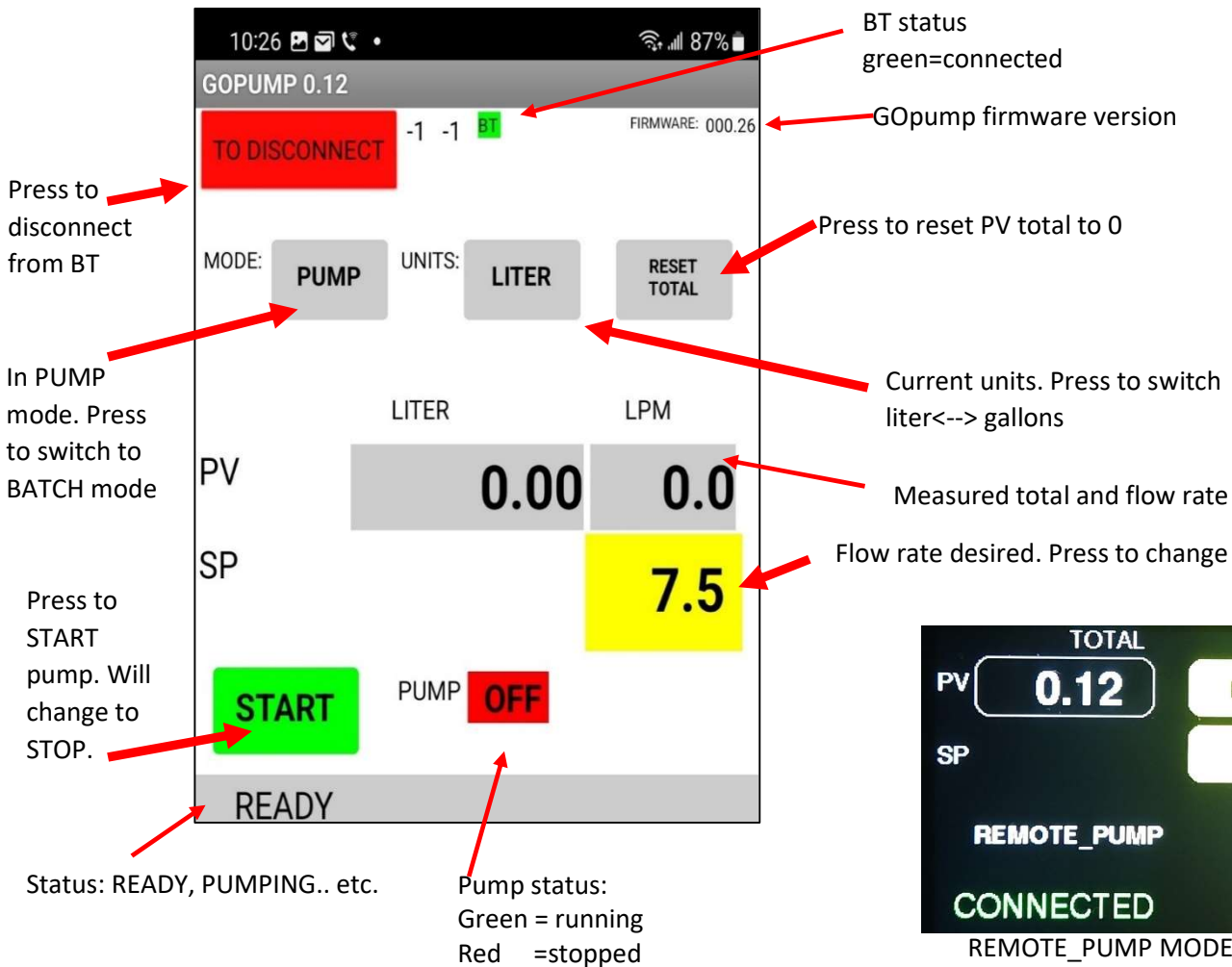


Select the paired GOpump

This is a unique mac address for each GOpump – also shown on start-up screen of touchpanel



3. If connection is successful the pump operating screen will appear:

BT status green=connected

GOpump firmware version

Press to disconnect from BT

Press to reset PV total to 0

In PUMP mode. Press to switch to BATCH mode

Current units. Press to switch liter<--> gallons

Measured total and flow rate

Flow rate desired. Press to change

Press to START pump. Will change to STOP.



Status: READY, PUMPING.. etc.

Pump status:
Green = running
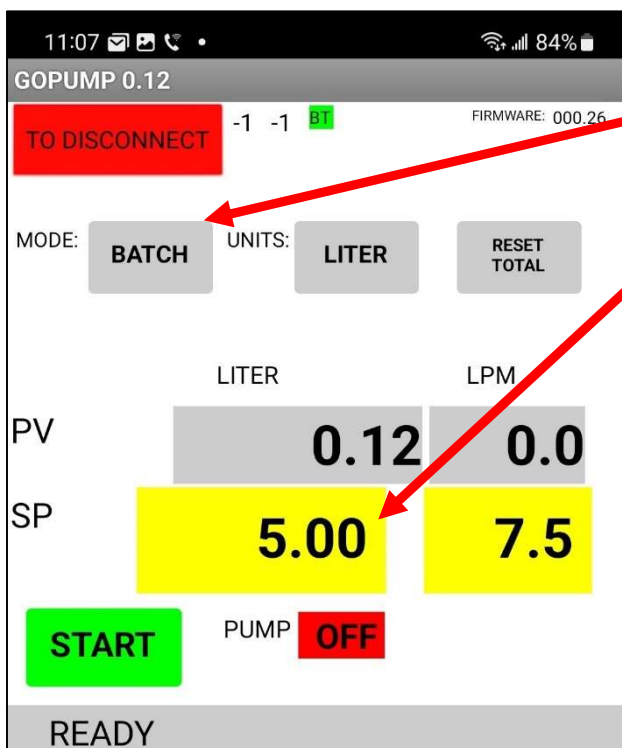Red    =stopped

REMOTE_PUMP MODE
Shows connected on touchpanel

**REMOTE PUMP MODE:**

Select PUMP to set to REMOTE PUMP mode. You can now change the flow rate setpoint and run the pump from the app. Click STOP to stop the pump. Totals are displayed and are retained until the RESET button is pressed on the app.

**REMOTE BATCH MODE:**

Select BATCH to set to REMOTE BATCH mode. Now you can set the total and the flow rate you want. Click on RUN to start the batching process. The pump will stop automatically once the required amount has been pumped. You can stop the batch by pressing CANCEL. As in PUMP mode, totals are displayed and are retained until the RESET button is pressed on the app.
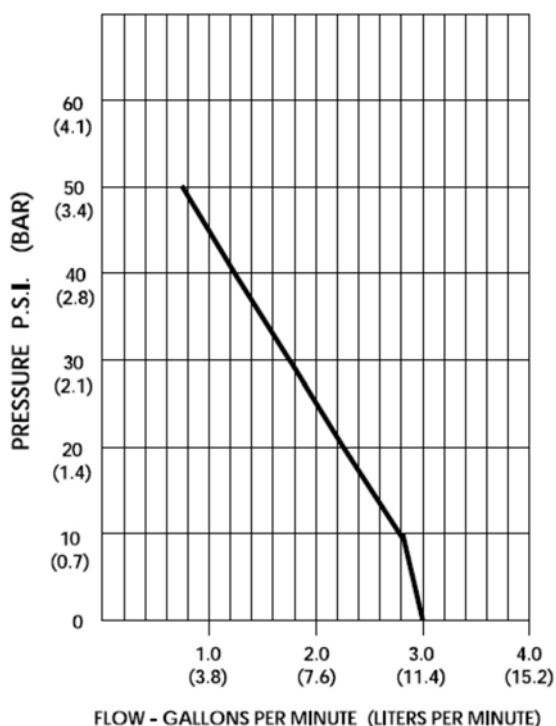


Now in BATCH mode. Press to switch to PUMP mode

In BATCH mode you can set the batch volume setpoint



REMOTE_BATCHER MODE
Shows connected on touchpanel

**SPECIFICATIONS:**

| | |
|---|---|
| Dimensions: | 31.8 x 27.2 x 18.2cm (12.5 x 11 x 7 inch) |
| Weight: | 8.3 Kg (18 lbs) |
| Flow rate range: | 1 to 10 lpm (0.26 gpm to 2.6 gpm) |
| Batch range: | 0.1 to 9999 liters |
| Power: | 115/230 VAC 2A with built-in GFI |
| Interface: | Color LCD touch panel |
| Environmental: | IP65 splash-proof |
| Process connection: | ½ FNPT inlet and outlet |



**CHEMICAL COMPATIBILITY:**

Product contact materials are Santoprene, polypropylene, and stainless steel. These are suitable for wine and food contact. Sprits up a maximum of 80 proof (40% v/v) can be pumped. Higher ethyl alcohol concentrations are NOT recommended due to risk of explosion or fire in the event of a leakage.

**CLEANING:**

GOpump is designed to be easy to clean. Recommended procedure:

1. After transfer, drain residual wine by lifting inlet line out of the liquid and using the PRIME button until flow stops.
2. Rinse pump by dipping inlet line into water and use the PRIME button until clear water comes out the outlet.
3. Place the inlet and outlet lines in bucket containing suitable detergent (e.g. PBW) and using the PUMP mode allow it to recirculate for a few minutes.
4. Rinse again as per step 2.
5. Remove the inlet and outlets. Open the DRAIN valve and rock the pump back and forth to completely drain any residual water. Close DRAIN valve. Repeat sanitization cycle before next use.

**TROUBLESHOOTING:**

GOpump is a robust device. But here are some troubleshooting tips:

1. **Leakage observed coming from under pump:** There is small hole in the bottom that drains the interior of the pump enclosure. This is a safety device that indicates that a leak has developed inside the enclosure. Open the 4 screws on the front and examine the interior for leaks. Contact tech@GOfermentor.com for repair.
2. **No power or display:** Check that GFI is not tripped. Press the RESET button on the GFI to power up. Check that EMERGENCY switch is rotated to ON position. Check electrical supply.
3. **Flow not accurate:** Ensure that there is no air or bubbles in the liquid by looking at the outlet sightglass. The pump will function, but accuracy is greatly reduced. Try slower flow rates to reduce foaming.
4. **Insufficient or no flow:** Check that inlet strainer is not clogged. Verify that the outlet is not shut off downstream of the pump. The pump will shut down automatically if the discharge pressure exceeds 45 psi. Pump restarts automatically when pressure is relieved.
5. **Pump shuts down while running:** Check that outlet is not restricted. Pump may shutdown if overheated. Allow pump to cool, then resume operation.